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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-------------------|-------------|----------------------|---------------------|------------------|
| 10/725,355        | 12/01/2003  | Sydney Keith Seymour | 030627/268881       | 1296             |
| 826               | 7590        | 08/22/2006           |                     |                  |
| EXAMINER          |             |                      |                     |                  |
| CORDRAY, DENNIS R |             |                      |                     |                  |
| ART UNIT          |             | PAPER NUMBER         |                     |                  |
| 1731              |             |                      |                     |                  |

DATE MAILED: 08/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |
|------------------------------|------------------------|---------------------|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |
|                              | 10/725,355             | SEYMOUR ET AL.      |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |
|                              | Dennis Cordray         | 1731                |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on \_\_\_\_\_.  
 2a) This action is FINAL.                  2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-31 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-31 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1)  Notice of References Cited (PTO-892)  
 2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
     Paper No(s)/Mail Date 3/15/04.

4)  Interview Summary (PTO-413)  
     Paper No(s)/Mail Date. \_\_\_\_\_.  
 5)  Notice of Informal Patent Application (PTO-152)  
 6)  Other: \_\_\_\_\_.

**DETAILED ACTION**

***Drawings***

The drawings are objected to under 37 CFR 1.83(a) because they fail to show an indexer/driver system, ref. no. 275, as described in the specification on p 17, line 1. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 10-17 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are:

In Claim 10, the structural relationship between the cigarette manufacturing device and the cigarette paper testing device has been omitted. For instance, do the devices operate in an attached fashion as part of an apparatus such that the inspected paper is automatically transferred to the cigarette manufacturing device, or are the two devices unconnected and separately operated?

In Claim 20, which depends from Claim 18, it is not clear how the installation of the second bobbin on a cigarette manufacturing device is related to or part of the method for examining a length of cigarette paper.

Claims 11-17 depend from Claim 10, thus inherit the incompleteness thereof.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3, 6, 9-10, 12, 15, 18, 20, 23, 26-28 and 31 are rejected under 35 U.S.C. 103(a) as unpatentable over Bokelman et al (5966218).

Bokelman et al teaches that it is known to inspect a banded cigarette paper by unwinding it from a first bobbin, inspecting the paper between bobbins, and rewinding the paper onto a second bobbin. Bokelman et al further teaches that many bobbins of paper must be inspected in a day, thus speed is a significant factor (col 1, lines 15-39). Bokelman et al discloses a procedure and apparatus for examining banded cigarette wrapping paper. The paper is unwound from a first bobbin and wound onto a second (rewind) bobbin. The band pattern on the paper is detected via analysis of reflections from an elongated beam of light directed onto the paper. One or more inspection stations (testing device or pattern detection device) can be used between the bobbins to determine properties of the paper (Abs; col 2, lines 38-40). A magnetic braking device cooperates with the first bobbin to control the tension in the paper (col 4, lines 27-33). The paper is wound onto the second bobbin by using a drive wheel to induce rotation of the second bobbin through frictional contact (col 5, lines 1-8). The pattern detection device communicates with a remote computer, thus generates a signal (Abs).

Bokelman et al does not disclose that the testing device and pattern detection devices are in communication with one another. Bokelman et al also does not disclose that the second bobbin can be used on a cigarette manufacturing device or that the paper examining apparatus and a cigarette manufacturing device can be used together as system.

It would have been obvious to one of ordinary skill in the art to have the testing device and pattern detection devices communicate with one another so the testing device can measure properties on the individual bands of a banded cigarette wrapping paper to determine, for example, the burn characteristics of the wrapper since the bands are typically provided in the paper to control the burn rate of a cigarette (if evidence is needed, see Allen et al, EP-0486213 A1, p 2, col 1, lines 30-38; col 2, lines 5-11). While the use of interchangeable first and second bobbins is not explicitly disclosed by Bokelman et al, it would have been within the general skill of one of ordinary skill in the art to use the same kind of bobbins for both first and second bobbins and to use bobbins that are directly transferable to a cigarette manufacturing device to eliminate the need for an additional costly step of rewinding the paper onto a suitable bobbin. It would further have been obvious to use the examined paper on a cigarette manufacturing device. It would have been obvious, after removing the fully rewound second bobbin, to replace it with the empty first bobbin to receive the next supply of tested paper.

Claims 1-6, 8-15, 17-23 and 25-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bokelman et al in view of Cholet (WO 03/019132 A1, US 2004/0187560 used for English translation).

The measurement apparatus and method of Bokelman et al have been described above. Bokelman et al does not disclose selective advancement control of the advancement device or of the testing device via a controller. Bokelman et al also does

not disclose configuring the testing device to determine the porosity or basis weight of a band on the paper.

Cholet discloses an automated testing apparatus and method for determining the permeability of a porous material having alternating porosity levels. The porous material can be a cigarette wrapping paper with bands of alternating porosity and the testing can be performed on an individual band. The measurement apparatus comprises two chambers that engage at opposite sides of a sample paper and define a sample area that is smaller than the dimensions of the bands in the paper (p 1, pars 3-6; p 2, par 30). The testing process is automated, with an advancement device (stepping motor and drive rollers) advancing the paper and the testing device actuated while the paper is stopped after each advancement to make a measurement. Based on a series of measurements, the future action of the advancement device is determined and controlled, thus the device can also be a pattern detection device. An attached processor performs calculations and controls the stepper motor and the measurement device (p 1, pars 10-14; p 2, pars 31-44; Claim 7).

The art of Bokelman et al, Cholet and the instant invention is analogous as pertaining to the measurement of properties of banded cigarette paper. It would have been obvious to one of ordinary skill in the art to automate the testing by using a controller to detect signals from the pattern detection device, to control the paper advancement (drive) device and direct the testing in the inspection device of Bokelman et al in view of Cholet to provide more data with less expenditure of time or money. It

would have been obvious to stop the paper at selected positions so that individual bands could be tested.

Claims 7, 16 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bokelman et al in view of Cholet and further in view of George et al (3032245).

Bokelman et al and Cholet do not disclose a tension control device comprising a paper engaging member between the first and second bobbins.

George et al disclose a variety of methods used to control tension in a moving web of paper (col 1, lines 9-17). The methods include a belt contacting the supply wheel (brake), spring controlled rollers that contact (operably engage) the web, and a vacuum box, across which the web travels (and operably engages) (col 2, lines 36-51).

The art of Bokelman et al, Cholet, George et al and the instant invention are analogous as solving the problem of controlling of tension in a moving band of paper. It would have been obvious to one of ordinary skill in the art to use one or more of the claimed tension controlling devices in the inspection device of Bokelman et al in view of Cholet and further in view of George et al as a functionally equivalent option

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure [Stultz (4246775), Engle et al (US 2003/0074954)]. Stultz discloses a method for measuring porosity for a moving web or sheet. Engle et al discloses an apparatus for rapidly measuring the permeability of a barrier material.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis Cordray whose telephone number is 571-272-8244. The examiner can normally be reached on M - F, 7:30 -4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*DRC*

DRC

*Eric Hug*

ERIC HUG  
PRIMARY EXAMINER